

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

PROJECT INFORMATION	
Project Title: West Cottonwood Guzzler Redevelopment	Project No. 09-104
Region/GMU: Region I / GMU 3C	HPC: Show Low
Project Type: Water development renovation	
Project Description: Redevelop the existing dilapidated trick tank from a current capacity of 1,900 gallons to 17,500 gallons. The site of the new catchment would be moved higher on the hillside to a more desirable location.	
Wildlife Species to Benefit: Elk, Deer, Turkey, Black Bear, and Mountain Lion	
Possible Funding Partners:	
Implementation Schedule: Beginning: Spring 2010 Completed: Spring 2011	NEPA Compliance: (if applicable) Completed: Yes <u>X</u> No ____ Projected Completion Date:
PROJECT FUNDING	
SBG Funds Requested: \$22,342.85	
Cost Share Funds: \$52,500.00	
Total Project Costs: \$74,842.85	
PARTICIPANT INFORMATION	
Applicant: Paul Greer (please print) Telephone: (928) 536-3668	Address: 2878 E. White Mountain Blvd. Pinetop, AZ 85935
AGFD Contact and Phone No. (If applicant is not AGFD personnel)	
Coordinated with: USFS Black Mesa District and Joe Currie	Date: May, 2007 thru July, 2009
Applicant's signature:	Date:

SEND COMPLETED APPLICATIONS TO:

AZ Game and Fish Department
Attn: Game Branch
5000 W. Carefree Highway
Phoenix, AZ 85086
rgregory@azgfd.gov

(revised 7-02-2007)

WAS PROJECT PRESENTED TO THE LOCAL HPC? YES X NO

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? IF SO WAS IT FUNDED?

This project was submitted last year in a slightly different version (included funding for 6 new dirt tanks) and was not funded.

NEED STATEMENT/PROBLEM ANALYSIS:

The Cottonwood guzzler is a Forest Service guzzler identified by the Arizona Game and Fish Department, Region I, as a critical water within Game Management Unit 3C. Built in the early 1980's, the guzzler is now dilapidated and no longer functional. When the guzzler was working, it was prone to going dry due to its small storage capacity (only 1,900) and the high numbers of elk and deer that regularly used the guzzler. The Cottonwood guzzler currently ranks #1 on the Region 1 water development priority list.

Located in the central portion of Unit 3C south of State Route 260, the Cottonwood guzzler lies in Wood Canyon just west of Cottonwood Wash and east of Ellsworth Point. This area supports high numbers of elk and deer and provides habitat for turkeys, black bears and mountain lions. The vegetative type in this area is Madrean Montane Conifer Forest with the principal species consisting of ponderosa pine and gambel oak. A large number of mature mast producing gambel oaks are found in the area. When the area burned in 2002 during the Rodeo-Chediski Fire, many of the large oaks survived. Additionally, regeneration of oaks after the fire has caused a dramatic increase in the number of new oak trees now growing in this area. The project area, as well as much of the habitat burned by the Rodeo-Chediski, has experienced a dramatic increase in production of herbaceous forage and browse species since the fire. This habitat type provides an excellent source of food and cover for mule deer, elk, and turkeys. The one thing missing in this area is a reliable source of perennial water. There is limited seasonal water available in the area, however, with seasonal water most wildlife in this area are transient.

The primary purpose of this proposal is to try to provide perennial water across all areas in Unit 3C. A complete perennial water evaluation of Unit 3C was completed in 2007 in the Unit 3C District Habitat Management Plan. The District Habitat Plan identified the Cottonwood guzzler area as a key area in Unit 3C void of perennial water. Most years, this area usually only has water from the time monsoons start and for about 3 to 5 months after the monsoons end. With a goal of perennial water coverage across all parts of Unit 3C, all species both game and non-game will benefit. This will enable animals to better distribute themselves across a larger area. Using a two-mile radius to evaluated perennial water distribution this catchment will affect about 5000 acres that currently has no perennial water coverage.

PROJECT OBJECTIVES:

To redevelop a water catchment that will provide wildlife with perennial water. This is part of an overall goal to provide perennial water for wildlife across the entire unit. The project would also create 6 new dirt tanks within the project area.

PROJECT STRATEGIES:

- Relocate trick tank to a new site ¼ mile south of the existing location that will provide greater soil stability and improved accessibility for wildlife using the trick tank.
- Replace the existing dilapidated metal tank (1,900 gal) and apron (20'x20') with three 3' x18' buried fiberglass ring tanks (17,500 gal) and a 24'x96' fenced R-panel apron.
- Install a 3' deep fiberglass walk-in drinker

- Install an evaporative cover to allow minimum evaporation
- Replace the existing barbed-wire fence with a pipe rail fence.
- Provide a relatively maintenance free perennial water source to wildlife in an area that lacks perennial water.

PROJECT LOCATION:

T. 11N, R. 19E. Section 32. See attached map. Land ownership for this project is Forest Service.

- New catchment site is marked on the map with a yellow triangle labeled as Cottonwood.
- The nearest perennial water lies 3.5 miles to the west in the old Day burn. This is a Game and Fish trick tank (#415) that is regularly monitored and hauled to when necessary. The closest perennial waters to the east are Forest Service Guzzlers both over 5 miles away. These guzzlers are also monitored and hauled to by the Department.
- Cottonwood Wash and the springs within 2 miles of the Cottonwood guzzler location provide only intermittent water throughout the year and are not perennial sources.

LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):

USDA Forest Service, Apache-Sitgreaves National Forest, Black Mesa Ranger District

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

HABITAT DESCRIPTION:

Madrean Montane Conifer Forest with the principal woodland species consisting of ponderosa pine and gambel oak. Browse species such as ceanothus, mountain-mahogany and New-Mexican locust are also present. Elevations in the project area range from 6,600 to 7,000 feet. Forage conditions are excellent in the Cottonwood guzzler area as a result of habitat alterations from the Rodeo-Chediski Fire and from the abundant gambel oak trees found in Wood Canyon.

ITEMIZED USE OF FUNDS:

Materials Needed For Catchment:

Quantity	Item	Price
3	3'x18' fiberglass ring tanks	\$29,763.36
1	Elk trough	\$ 3,268.32
1	24'x96' apron	\$ 6,500.00
1	24' fiberglass gutter	\$ 733.92
1	Apron infrastructure	\$ 1,000.00
1	Livestock fencing	\$ 3,500.00
1	Fencing for apron	\$ 3,200.00
1	Plumbing	\$ 500.00

(\$9,921.12 per tank)

Catchment Costs:

Sub-total = \$48,465.60

Tax = \$3,877.25

Total = \$52,342.85

Arizona Game & Fish:

Labor + Equipment + Vehicle + Per Diem (for length of the project) = \$20,000

Region I deer habitat funding (Cost Share) = \$30,000

USDA Forest Service:

Environmental compliance work = \$2,500 (COMPLETE)

Total Cost = \$74,842.85

Total Cost Share = \$52,500.00

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

- Arizona Game and Fish will coordinate and construct or contract the construction of this project
- USDA Forest Service/ Environmental Compliance

PROJECT MONITORING PLAN:

Arizona Game and Fish conducts wildlife surveys for elk and deer in the project area. The Department will continue to do these surveys and analyze the data with respects to this project. Some anticipated outcomes from the project are better wildlife and livestock distribution leading to improved range conditions.

PROJECT MAINTENANCE:

AZGF will monitor and complete all maintenance need at this wildlife water.

PROJECT COMPLETION REPORT TO BE FILED BY:

Paul Greer / AZGF

WATER DEVELOPMENT PROJECTS (see attached worksheet):

WATER DEVELOPMENT WORKSHEET

PROJECT NAME: West Cottonwood Guzzler

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”**
Yes
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
Joe Currie 4/21/08 and 7/23/09
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**
___2-4 ___4-6 ___6-8 ___8-10 ___10-12 ___12-14 ___14-16 X>16
- 4) **Is there a perennial water source available to big game within four miles of this project?**
X YES (please complete #5 below) ___NO (skip #5 below)
- 5) **For the accessible, perennial water source nearest this project:**
Name of water source: Coal Springs AZGF Catchment #415
Type of water source (catchment, spring, dirt tank, etc.): Catchment
Ownership of water source: AZGF
Distance in miles from project: 3.5 miles
- 6) **Is the target wildlife species a result of transplant efforts?** ___YES XNO
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.**
NA
- 8) **Please provide the following information about access to the proposed site:**
Type of access (mark one): X 2x4 vehicles ___4x4 only ___foot only**
**If foot access only: Distance in miles: Approx. hiking time:

-- Does access to this site require crossing private or tribal lands? ___YES XNO

-- Please describe any restrictions to public access: NA
- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**
 - (3) 3’deep X 18’diameter Fiberglass ring tank
 - (1) 3’deep Fiberglass “Elk” Trough
 - (1) 24’ Standard Fiberglass Gutter
 - (1) Standard 150’ X 150’ Piperail exclosure fence
 - (1) Standard Apron Exclosure fence
 - (1) 24’wide X 96’long R-panel apron and metal frame
 - Assorted plumbing

10) Was a site visit completed? X Yes ___ No

If Yes, please list personnel that attended and date.

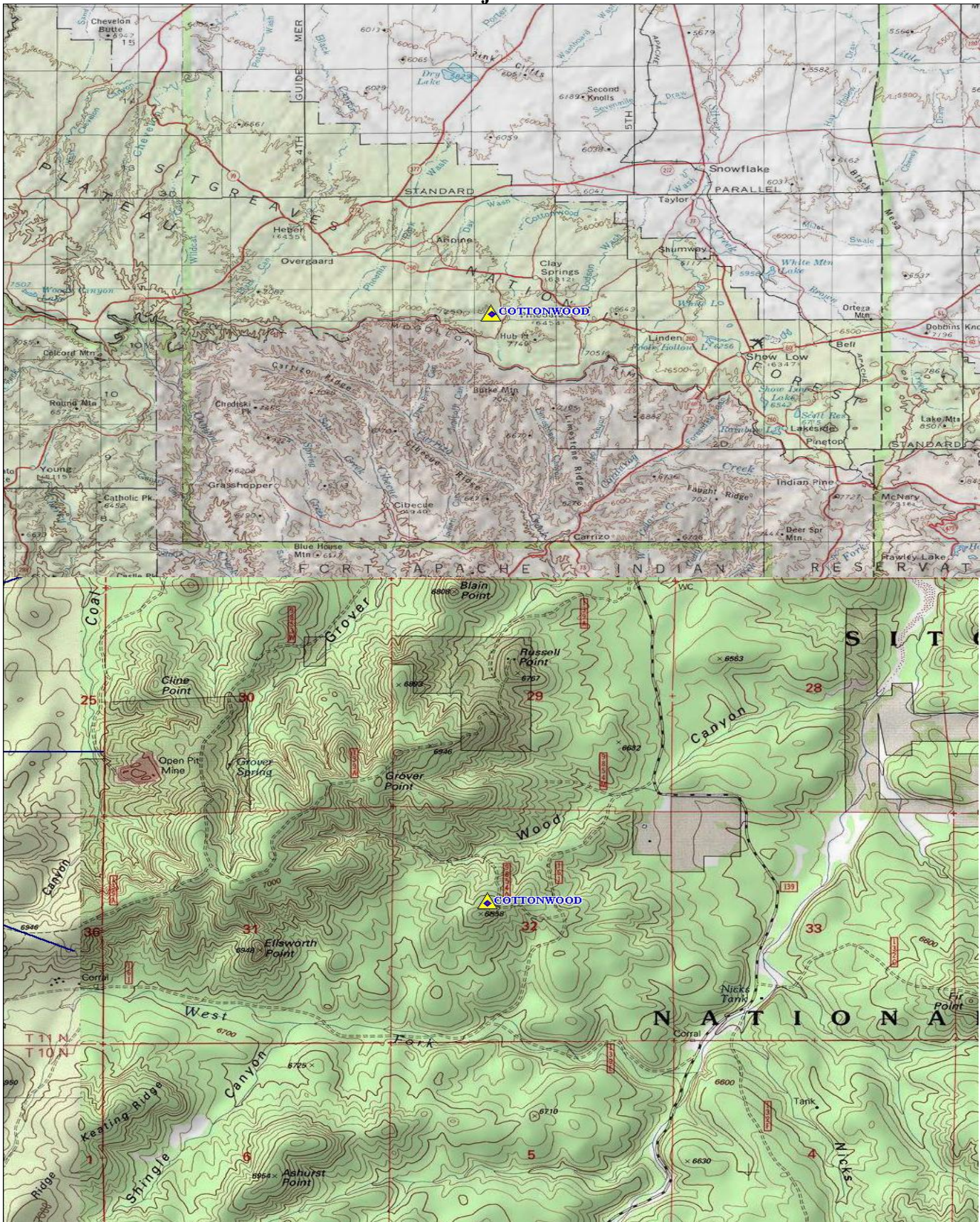
Paul Greer AZFGD, Bob Birkeland AZGFD, Brian Dykstra USDA Forest Service on 5/21/2007





(revised 7-02-2007)

Project Location



South-central GUMU 3C Perennial Waters (with 2-mile radius water coverage)

